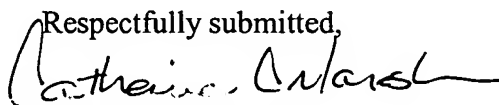


34. The device of claim 31 wherein the x-ray source requires a voltage of greater than or equal to 10 kilovolts
37. The device of claim 31 wherein the device is sized to be inserted into a blood vessel of the body and the device has a maximum diameter of 3.0 millimeters.
38. The device of claim 31 wherein the device is sized to be inserted into a blood vessel of the body and the device has a maximum diameter of 2.5 millimeters.
39. The device of claim 31 wherein the device is sized to be inserted into a blood vessel of the body and the device has a maximum diameter of 1.5 millimeters.
41. A device for insertion into a patient's cardiovascular system, comprising:
a catheter with a lumen the catheter having a proximal portion and a distal portion an x-ray source at the catheter distal portion, the x-ray source comprising a composite structure comprising a housing that joins a cathode and an anode, wherein the housing is composed of boron nitride and has a diameter less than 3 mm; and
a flexible coaxial cable in the lumen and operably coupled to the x-ray source.

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Respectfully submitted,



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